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ABSTRACT:

CHG DATE=19940730 STATUS=O> A child's high chair has a stand consisting of two sides each of which comprises first and second legs (98, 100, 102, 104) which are pivotally connected to one another at an intermediate point (106, 108) along their length. A seat body is pivotally mounted on the upper ends of the legs (98, 100, 102, 104). Each side of the stand has a first link (114, 116) pivotally connected at one end to the upper end of its second leg (102, 104) and a second link (118, 120) pivotally connected at one end to the upper end of the first leg (98, 100) and at its other end to a slider (122, 124) mounted on the first link (114, 116). The seat body comprises a seat frame (82) having a pair of mutually parallel frame portions each of which is pivotally connected at a first location to the upper end of a respective one of the first legs (98, 100) and at a second location to the upper end of a respective one of the first links (114,

116). <IMAGE>

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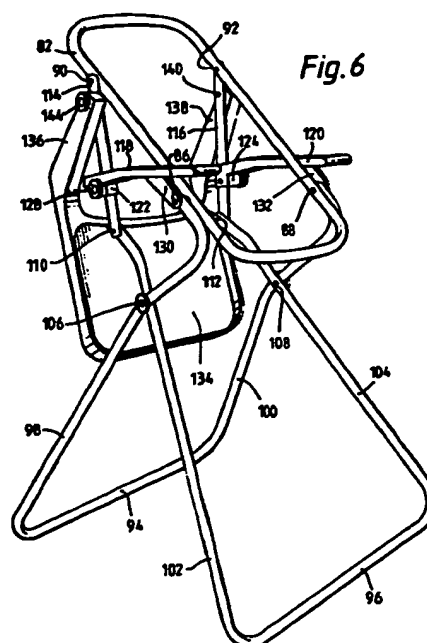
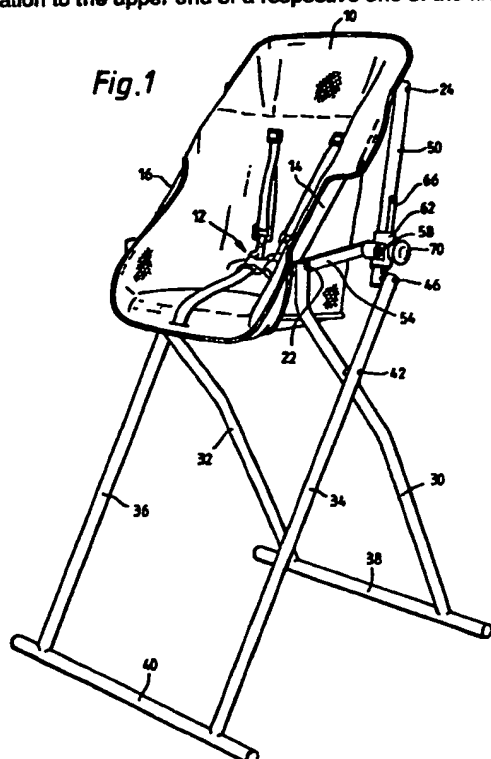
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(54) High chair

(57) A child's high chair has a stand consisting of two sides each of which comprises first and second legs (98, 100, 102, 104) which are pivotally connected to one another at an intermediate point (106, 108) along their length. A seat body is pivotally mounted on the upper ends of the legs (98, 100, 102, 104). Each side of the stand has a first link (114, 116) pivotally connected at one end to the upper end of its second leg (102, 104) and a second link (118, 120) pivotally connected at one end to the upper end of the first leg (98, 100) and at its other end to a slider (122, 124) mounted on the first link (114, 116). The seat body comprises a seat frame (82) having a pair of mutually parallel frame portions each of which is pivotally connected at a first location to the upper end of a respective one of the first legs (98, 100) and at a second location to the upper end of a respective one of the first links (114, 116).



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Fig. 1

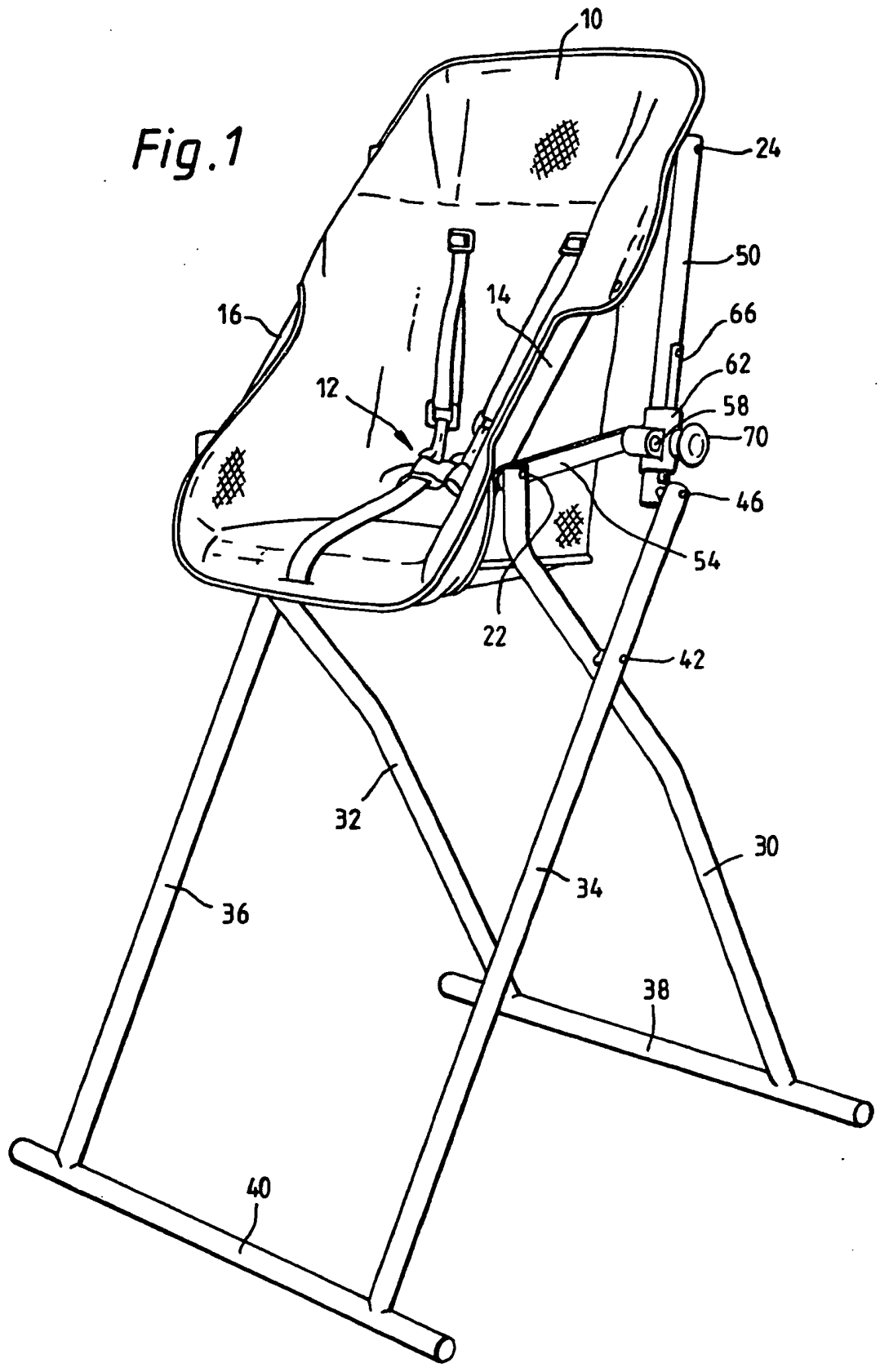
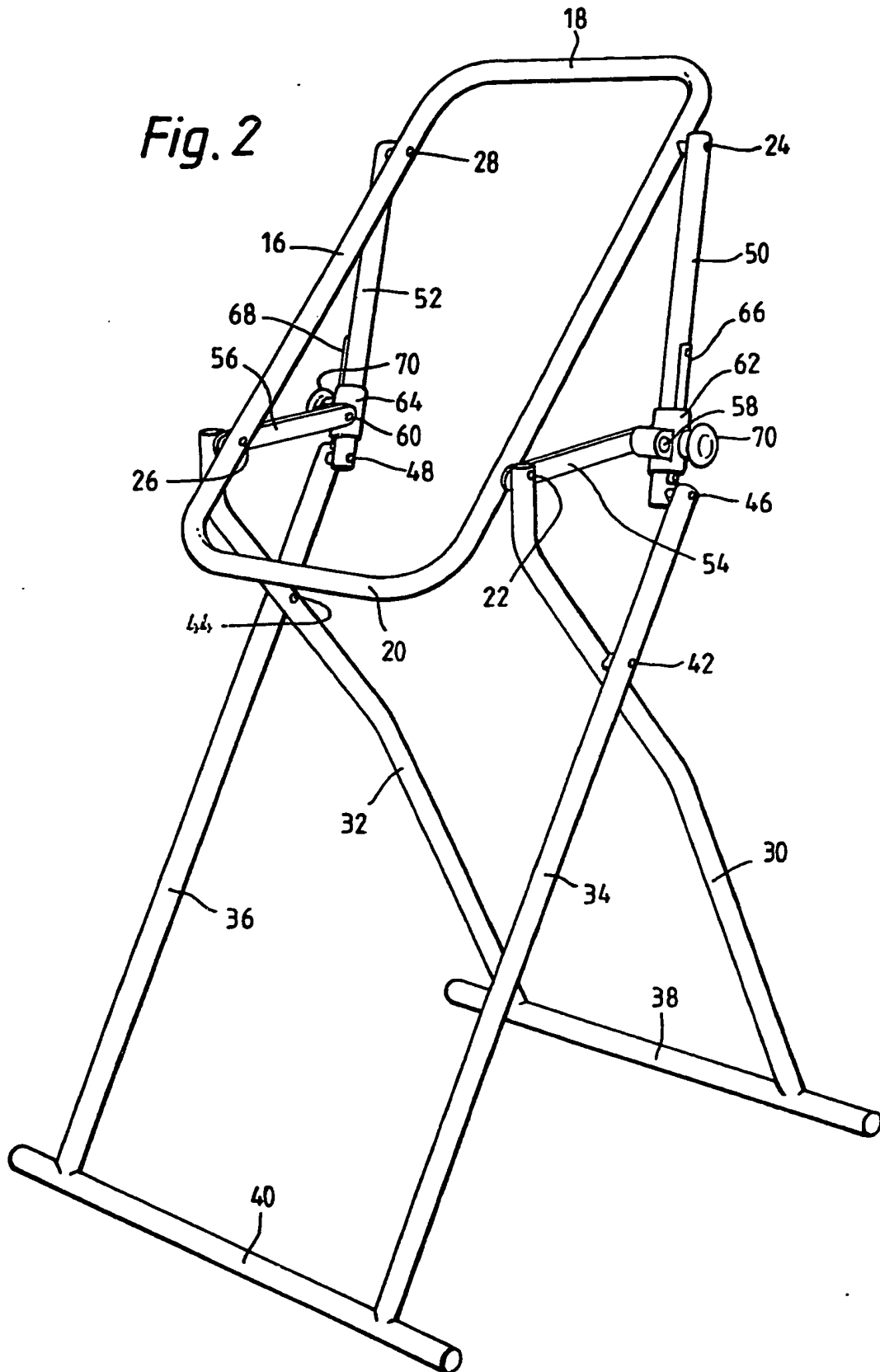


Fig. 2



3/4

Fig. 3

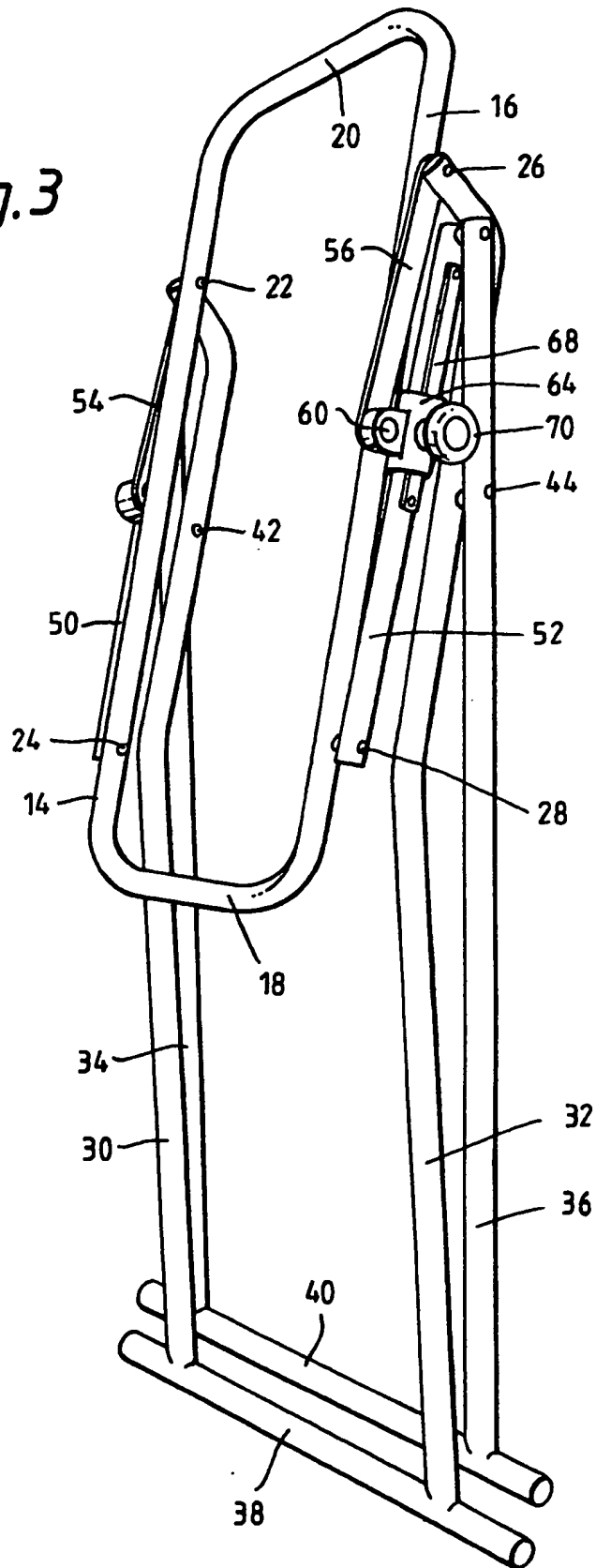


Fig. 4

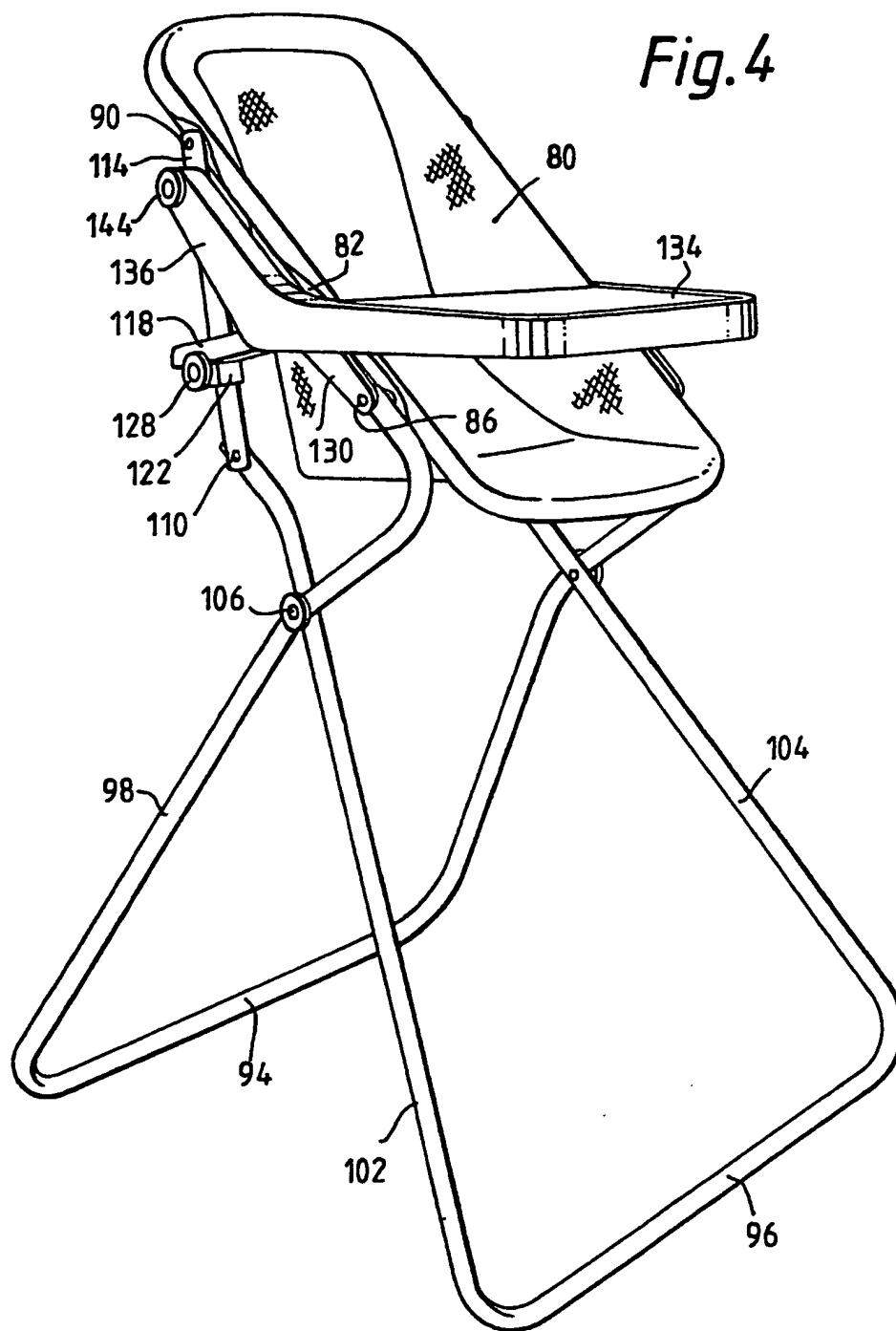
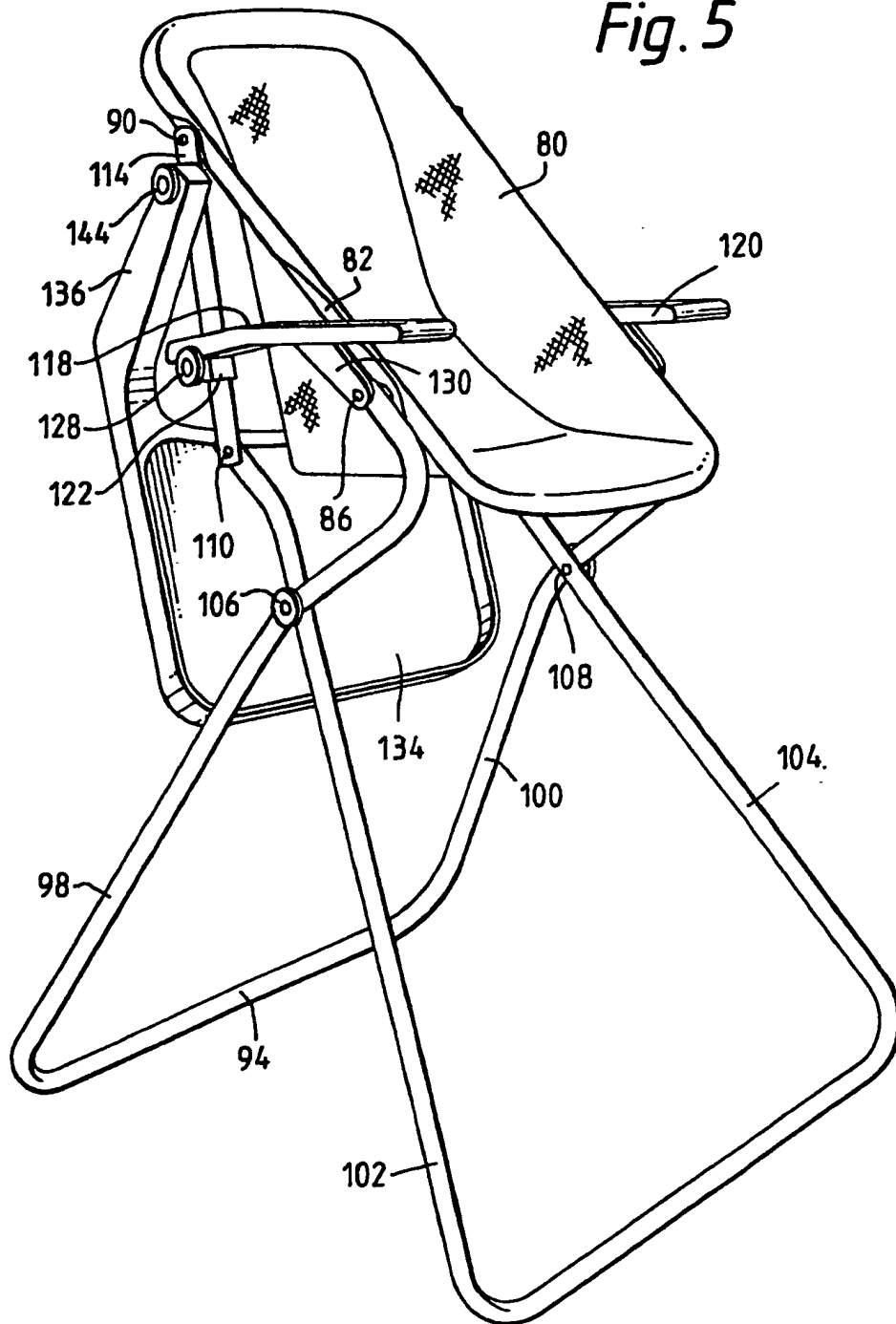
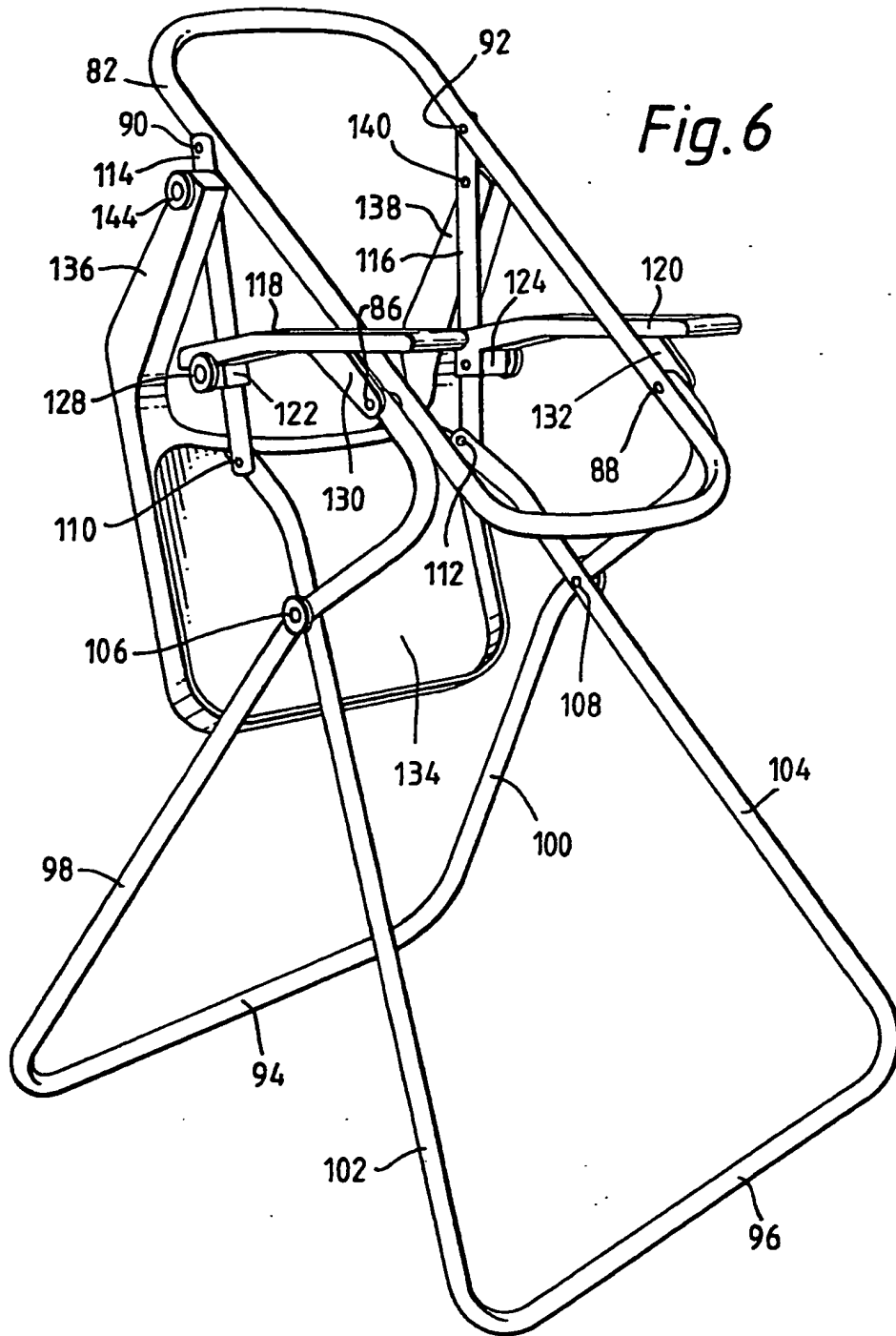


Fig. 5





7/7

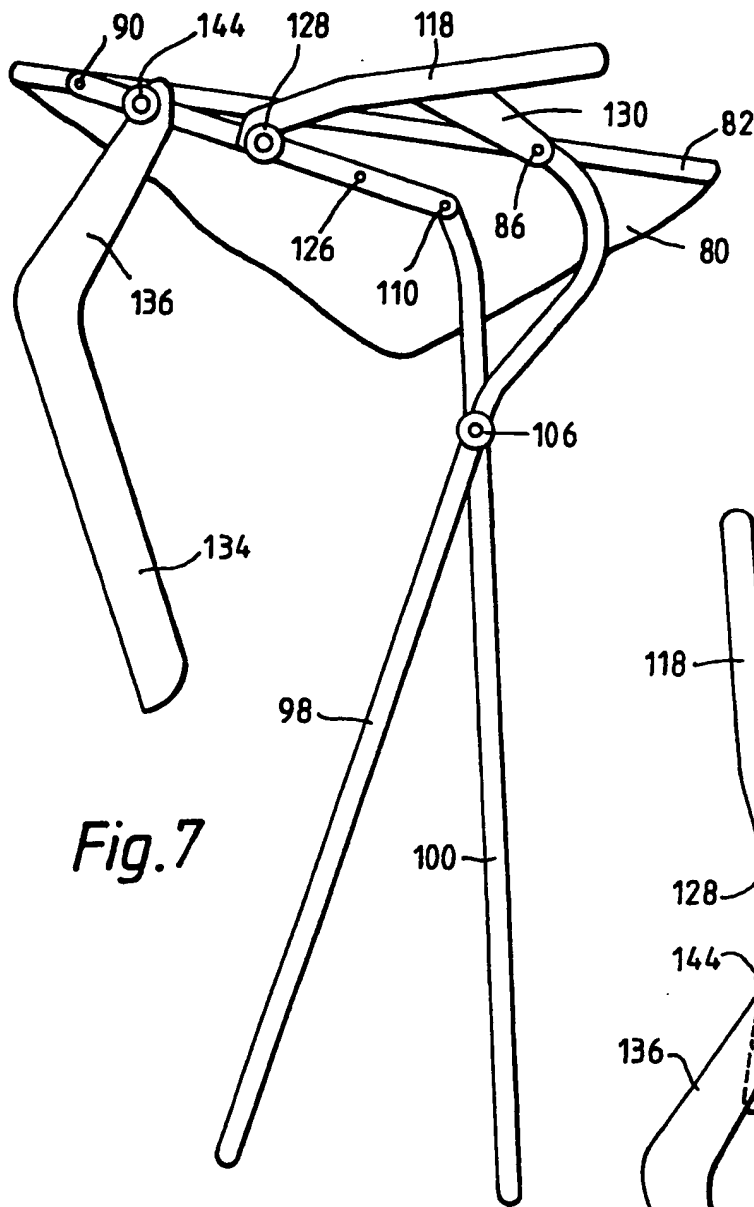


Fig. 7

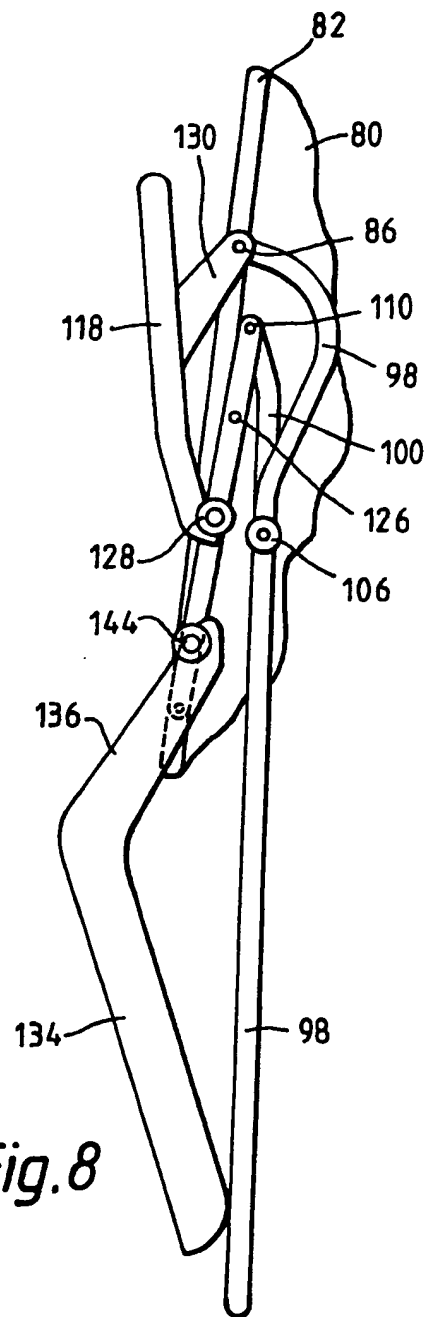


Fig. 8

HIGH CHAIR

This invention relates to a child's high chair of the type having a stand consisting of two sides each of which comprises first and second legs which are pivotally connected to one another at an intermediate point along their length.

It is an object of the invention to provide a high chair of the foregoing type in which the length to which the seat body projects beyond the legs in the folded condition is less than is possible with currently available high chairs.

According to the invention, in a child's high chair comprising a stand and a seat body; the stand has two sides each of which comprises first and second legs which are pivotally connected to one another at an intermediate point along their length, a first link pivotally connected at one end to the upper end of its second leg and a second link pivotally connected at one end to the upper end of the first leg and at its other end to a slider mounted on the first link, the legs being angularly movable between a deployed position in which their ends are spaced apart with the upper end of the first leg in front of the upper end of the second leg and a folded position in which the first and second legs lie parallel to one another; and wherein the seat body comprises a seat frame having a pair of mutually parallel frame portions each of which is pivotally connected at a first location to the upper end of a respective one of the first legs and at a second location to the upper end of a respective one of the first links.

In one form of the invention, the seat frame portions comprise opposite sides of a rectangular seat frame from which a fabric seat body is suspended.

The second link of each side frame may project forwardly from the seat frame so as to serve as an arm rest. To enable such an arm rest to be positioned at a

convenient height without prejudicing the optimum position of the pivotal connection to the upper end of the first leg, the second link may be provided with a downwardly projecting extension, the lower end of which is pivotally connected to the upper end of such first leg.

A table comprising a tray portion and a pair of rearwardly extending side limbs, may be mounted on the seat by means of pivot pins on the ends of the side limbs engaging in respective holes near the upper ends of each of the first links. Preferably, the pivot pins are spring-biassed in their axial direction so as to permit removal of the table from the chair.

Embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a high chair in accordance with a first embodiment of the invention, having a fabric seat body and shown in the deployed position;

Figure 2 is a perspective view of the high chair shown in Figure 1, with the fabric seat body removed;

Figure 3 is a perspective view illustrating the seat shown in Figure 2 in a folded position;

Figure 4 is a perspective view of a high chair in accordance with a second embodiment of the invention, having a table shown in its deployed position;

Figure 5 is a perspective view, similar to Figure 4, but with the table in a folded-back position;

Figure 6 is a perspective view, with the stand and table in the position shown in Figure 5, but with the fabric seat body removed;

Figure 7 is a side view of the high chair shown in Figures 4 and 5 in a partially folded position; and

Figure 8 is a side view similar to Figure 7 but showing the chair in its fully folding position.

Referring to Figures 1 and 2, a high chair has a fabric seat body 10, with a harness 12, mounted on a rectangular frame formed from a single piece of metal tube

and having side portions 14 and 16, a top portion 18 and a bottom portion 20.

5 The side portion 14 of the seat frame carries a laterally projecting pivot pin 22 at a location adjacent to its junction with the bottom portion 20 and a second similar pivot pin 24 adjacent to its junction with the top portion 18. Similar pivot pins 26 and 28, aligned with the pivot pins 22 and 24 respectively, project from the other side portion 16.

10 The seat frame is supported on an integral stand, each side of which consists of a respective first leg 30, 32, the upper ends of which project forwardly, and respective second legs 34, 36, the upper ends of which project rearwardly. The bottoms of the first legs 30 and 32 are interconnected by a rear base member 38 while the 15 bottoms of the second legs are interconnected by a front base member 40. The first and second legs 30 and 34 on one side are pivotally interconnected at intermediate positions along their length by a pivot pin 42 while the first and 20 second legs 32 and 36 are similarly pivotally interconnected by a further pivot pin 44 aligned with the pivot pin 42.

25 The upper ends of the first legs 30 and 32 are pivotally attached to the pivot pins 22 and 26 respectively. The upper ends of the second legs 34 and 36 are connected by respective pivot pins 46 and 48 to lower ends of respective first links 50 and 52, the upper ends of which are pivotally connected to the pivot pins 24 and 28 respectively.

30 Respective second links 54 and 56 have their front ends pivotally mounted on the pivot pins 22 and 26 respectively and their rear ends connected by respective pivot pins 58 and 60 to respective sliders 62 and 64 mounted on corresponding first links 50 and 52. Each 35 slider 62, 64 also embraces a respective latch track 66, 68 which is secured to the corresponding first link 50, 52. Each slider 62, 64 also has a respective latch bolt (not

shown) which is spring-biassed into engagement with a detent formation on the corresponding latch track 66, 68 and has a knob 70, 72 on its end, by means of which it may be pulled out of engagement with the corresponding latch track 60, 68 to permit the slider 62, 64 to move therealong.

When the high chair is in its deployed position shown in Figures 1 and 2, the length of the links 54 and 56 determine the spacing between the ends of the first legs 30 and 32 on the one hand and the second legs 34 and 36 on the other. The length of the first links 50 and 52 determine the angle of the seat frame formed by the portions 14, 16, 18 and 20. When the high chair is to be folded, the knobs 70 and 72 are pulled outwardly to disengage their latch bolts and the sliders 62 and 64 move upwardly so that the latch bolts are out of alignment with their respective detent formations. The top portion 18 of the seat frame is then pulled forwardly and downwardly so that the seat frame pivots about the pivot pins 22 and 26 to the position shown in Figure 3. The length to which the seat frame projects beyond the upper ends of the first legs 30 and 32 is restricted to the distance between the bottom portion 20 of the seat frame and the pivot pins 22 and 26.

Figures 4 to 6 show another high chair in accordance with the invention having a fabric seat body 80 mounted on a rectangular tubular frame, similar to the frame 14-20 of the chair shown in Figures 1 to 4. The seat body may be fitted with a harness (not shown) similar to the harness 12. The two side portions of the seat frame 82 carry respective mutually aligned lower pivot pins 86 and 88 and upper pivot pins 90 and 92, equivalent to the pivot pins 22-28 of Figures 1 to 4.

The seat frame 82 is supported on a integral stand formed from two U-shaped members 94 and 96, the side limbs of the U-shaped member 94 forming respective first legs 98 and 100 of the two sides of the stand and the side limbs 102 and 104 of the second U-shaped member forming

respective second legs of the two sides of the stand. The first and second legs 98 and 102 on one side of the stand are pivotally connected by a pivot pin 106 while the corresponding legs on the other side of the stand are pivotally interconnected by a pivot pin 108.

The upper ends of the first legs 98 and 100 are respectively pivotally attached to the pivot pins 86 and 88. The upper ends of the second leg 102 and 104 are connected by respective pivot pins 110 and 112 to the lower end of respective first links 114 and 116, the upper ends of which are pivotally connected to the pivot pins 90 and 92 respectively.

Arm rests 118 and 120 are pivotally mounted on respective sliders 122 and 124 which are arranged to be slidable along the first links 114 and 116. The slider 122 carries a latch bolt (not shown) which is spring biased into engagement with a hole 126 (Figure 7) in the first link 114 to retain the slider 122 in the position illustrated in Figures 4 and 5. A knob 128 on the end of the latch bolt allows it to be pulled out of engagement with the hole 126 to permit the slider 122 to move. There is a correspondingly arranged latch bolt for the slider 124.

Each arm rest 118, 120 has a downwardly extending projection 130, 132 which is generally parallel to the adjacent part of the seat frame 82 when the seat is erected, and the bottom end of which is pivotally mounted on the pivot pin 86, 88. The arm rests 118 and 120 thus serve as second links connecting the pivot pins 86 and 88 to the sliders 122 and 124 on the first links 114 and 116.

A table having a tray portion 134 and side arms 136 and 138 is arranged, when in use, to rest on the arm rests 118 and 120. The outer ends of the side arms 134 and 136 are inclined upwardly generally parallel to the adjacent parts of the seat frame 82 and have respective plungers on their outer ends which are spring-biased into holes 140 (Figure 6) near the upper ends of the first links

114 and 116. These plungers have knobs 144 on their outer ends which can be pulled outwardly to allow complete removal of the table from the high chair. Normally the table is left in place and folded over the back of the seat 80 to the position shown in Figures 5 and 6 when not required for use.

When the frame of the high chair is to be folded, the table is first placed in the position shown in Figures 5 and 6. The knob 128, and the corresponding knob on the other side of the seat, are then pulled outwardly to free the sliders 122 and 124 which are then slid upwardly along the first links 114 and 116 initially to the position shown in Figure 7. Next, the ends of the seat frame 82 are grasped and used to continue the folding movement until the high chair is in the configuration shown in Figure 8. When it is desired to restore the chair to its position of use, the seat frame is tilted back until the respective spring-loaded plungers re-engage in the holes 126.

CLAIMS

1. A child's high chair comprising a stand and a seat body; wherein the stand has two sides each of which comprises first and second legs which are pivotally connected to one another at an intermediate point along their length, a first link pivotally connected at one end to the upper end of its second leg and a second link pivotally connected at one end to the upper end of the first leg and at its other end to a slider mounted on the first link, the legs being angularly movable between a deployed position in which their ends are spaced apart with the upper end of the first leg in front of the upper end of the second leg and a folded position in which the first and second legs lie parallel to one another; and wherein the seat body comprises a seat frame having a pair of mutually parallel frame portions each of which is pivotally connected at a first location to the upper end of a respective one of the first legs and at a second location to the upper end of a respective one of the first links.
2. A high chair according to claim 1, wherein the seat frame portions comprise opposite sides of a rectangular seat frame from which a fabric seat body is suspended.
3. A high chair according to claim 1 or 2, wherein the second link of each side frame projects forwardly from the seat frame so as to serve as an arm rest.
4. A high chair according to claim 3, wherein each second link is provided with a downwardly projecting extension, the lower end of which is pivotally connected to the upper end of the first leg.
5. A high chair according to any preceding claim, wherein a table comprising a tray portion and a pair of rearwardly extending side limbs, is mounted on the seat by means of pivot pins on the ends of the side limbs engaging in respective holes near the upper ends of each of the first links.

6. A high chair according to claim 5, wherein the pivot pins are spring-biased in their axial directions as to permit removal of the table from the chair.

5 7. A child's high chair, substantially as hereinbefore described with reference to Figures 1 to 3 of the accompanying drawings.

8. A child's high chair, substantially as hereinbefore described with reference to Figures 4 to 8 of the accompanying drawings.